The girl was admitted to the day-hospital for 5 days; concretions were apparently produced several times a day (Fig. 2). The patient's mother, who insisted on being present at all times, claimed that the chalk-stones were spontaneously produced at variable time intervals.

Chemical analysis of the concretions was carried out, revealing that calcium in the form of calcium carbonate was the main constituent (>90%), with traces of organic material.

Finally, the patient was surprised by a physician while she was removing chalk concretions from her pocket. On being asked for an explanation, she declared that she had removed the concretions from her left eye a few days before and had forgotten to inform the physicians.

Comment

Having become aware that the patient was intentionally introducing chalk concretions into her lower fornix, medical and nursing staff spent much time before discovering her in the act. Her parents were prone, on the other hand, to believe their daughter, and when they felt the physicians were suspicious they reacted promptly. The first ophthalmologist's diagnosis (lacrimal drainage system lithiasis) had fully satisfied them and they expected the diagnosis to be confirmed by us. The patient was very skilful in deceiving the physicians by carefully baffling staff vigilance. When she noted that other physicians' curiosity had been aroused she started producing calculi and continued to play her role as a performer. A psychiatric referral and a social worker's assistance were promptly rejected by her parents. It was thus very difficult for us to explain the malingering. We would like to point out the following: (1) There was a family history of lithiasis: the patient's mother reported that she had undergone surgery for renal calculi, the patient's grandmother had died due to hepatolithiasis, and her 8-year-old cousin had undergone surgery for renal lithiasis. (2) The day before the admission the family had been on a religious pilgrimage, and at that time there were many reports in the Italian media regarding a Madonna statue crying blood-tears in a city near Rome.

As previously stated, this case can be considered one of Munchausen syndrome. We are not able to exclude a problem-free home environment, but our impression was that of an apparently normal family living in the suburbs of Rome. In our opinion the deliberately malingering girl was expressing a strong cry for help, but at the same time was incapable of describing her needs. We also noticed a strong need to gratify her mother and a dramatic and spectacular way of expressing diseases. In conclusion, we agree with Kampan *et al.*,[2] who consider that Munchausen patients desire to be ill, and that in these patients the illness is a way of obtaining fulfilment and satisfaction,[2] with the aim of obtaining social acceptance.

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Sir,

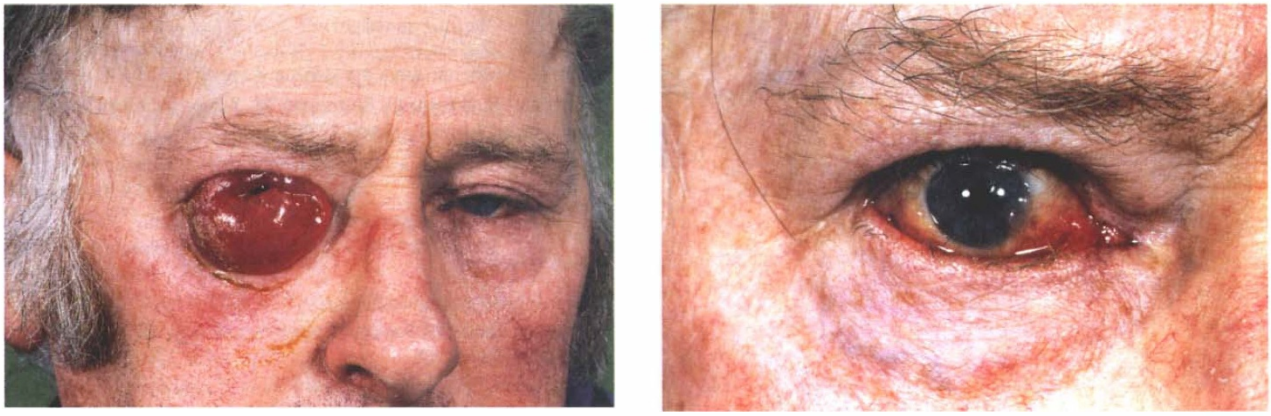
An unusual presentation of Graves' disease

In the adult population, Graves' disease is the most common cause of unilateral or bilateral proptosis. Conjunctival injection and chemosis are often associated features. In some patients the process is quite aggressive and may be confused with such disorders as idiopathic orbital inflammation or carotid-cavernous fistula.[1] Here we report a patient who presented with severe unilateral chemosis which caused significant disfigurement and visual impairment.

Case report

A 62-year-old man presented to casualty with a 6 week history of swelling over his right eye which was obscuring his vision. There was no past medical or ocular history of note and other than lethargy he denied any symptoms of thyroid dysfunction. On examination uncorrected visual acuities were 6/36 right and 6/9 left. Colour vision was reduced on Ishihara testing in the right eye (four incorrect plates). There was gross right-sided conjunctival chemosis with splinting of the eyelids (Fig. 1a). Pupillary reaction to light was normal bilaterally. Eye movements were full on the left side but difficult to assess on the right. Anterior segment examination of the left eye showed no abnormality and the optic discs appeared healthy. There was no palpable goitre. Clinically he appeared euthyroid. The remainder of the examination was unremarkable.

CT scan of the orbits revealed marked proptosis of the right globe associated with enlargement of the extraocular muscles (Fig. 2). On conjunctival biopsy the epithelium was hyperplastic with underlying myxomatous and oedematous stroma. Thyroid function tests revealed a serum free thyroxine of 30.7 pmol/l (normal range 7.6–19.7 pmol/l) and TSH <0.01 mU/l (normal range 0.4–4.5 mU/l). Thyroid microsomal antibody screen was negative. The presumptive diagnosis was a unilateral exophthalmopathy with possible compressive optic neuropathy secondary to Graves' disease.



(a) (b)

Fig. 1. *Clinical appearance (a) before and (b) 4 weeks after treatment with combined immunosuppression and radiotherapy showing resolution of chemosis.*

The patient was started on carbimazole 10 mg t.i.d. and thyroxine 0.1 mg daily. The chemosis was treated with subconjunctival injections of dexamethasone 8 mg daily for 3 days, topical Viscotears (CIBA Vision) and ice packs. In addition oral prednisolone 60 mg daily was commenced. One week later the chemosis was reduced and uncorrected visual acuity had improved to 6/18 in the right eye. Pupillary reaction to light was normal bilaterally and the colour vision was unchanged. The prednisolone dose was then gradually reduced over a 4 week period and stopped.

Six weeks after this the patient returned with a marked increase in chemosis. Plasma glucose was modestly elevated (8–10 mmol/l) and treated with diet and carbohydrate restriction. Orbital decompressive surgery was discussed but declined by the patient. He was therefore commenced on oral prednisolone 80 mg daily together with azathioprine 200 mg daily and referred for orbital radiotherapy. He received 20 Gy in 10 fractions over 2 weeks. Four weeks after the completion of radiotherapy the conjunctival swelling was markedly reduced (Fig. 1b) and visual acuity had improved to 6/12 uncorrected, although there was still right proptosis and lagophthalmos. He reported a feeling of increased energy and general well-being. Azathioprine and steroids were then further reduced. Insulin has been required to control hyperglycaemia. Currently he is biochemically euthyroid.

Comment

Unilateral eye disease occurs in approximately 5–14% of patients with Graves' ophthalmopathy.[2] Several series have demonstrated Graves' disease to be the most common cause of unilateral proptosis, comprising between 15% and 30% of such cases.[2] The unilateral nature of the ophthalmopathy and also the severity of the chemosis were the most striking features of our case. The mechanisms underlying unilateral eye involvement are poorly defined, although local anatomical factors may be partly responsible. Hudson *et al.*[3] postulated that superior rectus muscle enlargement may cause compression of the superior ophthalmic vein leading to reduced venous outflow from susceptible orbits and is likely to be a contributing factor leading to proptosis and chemosis in Graves' ophthalmopathy. The severity of the

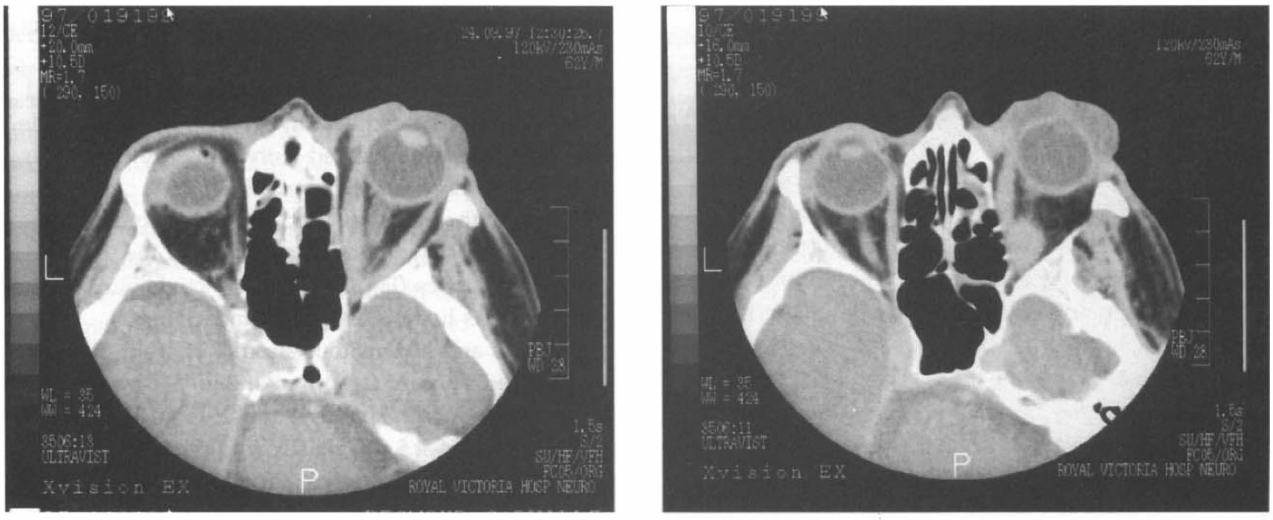


Fig. 2. *Axial computed tomograms of the orbits showing a soft tissue mass related to the anterior surface of the right globe. There is proptosis of the right globe and also thickening of the extraocular muscles on this side.*

chemosis in this case was at least partly due to the delay in the patient seeking medical attention. The swollen conjunctiva had prolapsed and its surface had become keratinised. Due to swelling of the orbital tissue and splinting between the eyelids the prolapsed conjunctiva was unable to return to its anatomical position.

Although the CT scan of the orbits was helpful in making the diagnosis, STIR (Short Tau Inversion Recovery) sequence MRI may have been more useful in this case as it gives an assessment of muscle water content in 'active' thyroid eye disease.[4] Active inflammation is associated with oedema within the tissues and will give a bright signal on the STIR sequence, which can be used to assess the degree of inflammation within the extraocular muscles.

The patient was treated with combined radiotherapy and medical immunosuppression as orbital decompressive surgery was declined. Claridge *et al.*[5] showed that early application of this combination therapy was more effective than either treatment alone in the management of active thyroid eye disease and also reduces the requirement for corrective surgery.

According to the NOSPECS classification the indication for treatment has been the severity of symptoms instead of the rate of progression of the disease. The soft tissue manifestations of Graves' disease have been apportioned a minor role in this clinical classification.[6] This is partly due to the difficulty in quantification of these findings, the absence of an associated immediate threat to vision and lack of specificity for Graves' disease especially when present unilaterally. However, the Mourits scoring classification is targeted more at assessing the rate of progression of thyroid eye disease and is helpful in predicting the therapeutic outcome of immunosuppressive therapy in Graves' ophthalmopathy.[7]

Our case illustrates that on occasions soft tissue changes can progress to cause considerable discomfort and interfere with vision.

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Sir,

Assessment of choroidal involvement in sarcoidosis with indocyanine green angiography

Ocular involvement is common in systemic sarcoidosis, anterior granulomatous uveitis being the most common finding.[1] Posterior segment involvement is generally found together with anterior segment signs.[1] We report a case with choroidal involvement only, in which sequential indocyanine green angiography (ICGA) helped to confirm the choroidal involvement and follow the resolution of the process.

Case report

A 52-year-old woman presented with erythematous papules on the face and extremities in June 1996. Biopsy of one papule revealed non-caseating granuloma, suggestive for sarcoidosis. The laboratory data, including serum angiotensin converting enzyme (ACE) level and chest radiograph, were unremarkable. Results of the ophthalmological examination were not significant. In January 1997, laboratory evaluation, gallium scintigraphy and thorax tomography were within normal limits.

In July 1997, increased serum ACE and urinary calcium levels were noted. Thorax tomography revealed increased reticular density and patchy consolidation. Ocular examination disclosed visual acuities of 20/20 in both eyes. There was a 5 × 8 mm nodule in the right lower eyelid. Anterior segments were quiet. A yellowish flat lesion was observed at the level of the choroid, temporal to the optic disc, in the right eye (Fig. 1, upper left). The retinal vessels appeared normal with no haemorrhages or exudates. There were no cells in the vitreous. Blind biopsy from the inferior forniceal conjunctiva revealed a non-caseating granuloma. Fundus fluorescein angiography (FFA) showed late staining hyperfluorescence corresponding to the lesion (Fig. 1, upper left). ICGA, performed with 25 mg of ICG using a Topcon 50 I/A (Topcon, Tokyo, Japan) camera coupled to an ImageNet (Topcon) system, demonstrated five patches of hypofluorescence starting very early and continuing for at least 20 min (Fig. 1, lower left). There was no significant hypo- or hyperfluorescence in late images (Fig. 1, lower right).